REMARKS

The Office Action of November 2, 2005 has been carefully studied.

To expedite prosecution, claims 36-51, 56-58 and 60-65 are cancelled with the right to file a divisional and/or a continuation application thereon.

Applicants traverse the withdrawal from consideration of claims 17-34, 54 and 55. The Examiner has considered claims 1-16, 35, 38, 39, 44, 45, 50, 52, 53, 56, 59-61 and 63. All of these claims are directed to a method of printing a document or a computer system, or the combination of a computer system and a processor. As such, each of the considered claims includes a computer and a printer. The withdrawn claims that have not been cancelled are directed to a printer, or a computer for causing a document to be provided in a form for printing by a printer. As such, the withdrawn claims include elements that are in the claims the Examiner has considered. The withdrawn claims are subcombination claims. The subcombination claims include limitations of claims that have been considered. There does not appear to be a single withdrawn subcombination claim that includes a limitation not found in a corresponding considered claim. Consequently, the withdrawn claims are not directed to inventions that are separate and distinct from the considered claims and consideration of all pending claims is in order.

Applicants note the indication of claim 59 containing allowable subject matter. To this end, the subject matter of claim 1, as presented in the previous response, is included in claim 59 that is now an independent claim.

Many of the pending claims, including each of independent claims 1, 17, 21, 35, 52 and 54 have been amended to define applicants' contribution to the art with greater particularity and to distinguish over the previously applied references. Each of claims 1 and 17 is amended to indicate

that printer resources are scheduled for printing at least one subsequent page of a document in accordance with, or in response to, resource information sent together with instruction data required to print the current page.

Claim 1 further requires the printer resources to be scheduled for printing the current page of the document.

Claims 27 and 35 include a somewhat similar limitation by requiring a programmed computer that is not part of a printer to generate resource information derived from printer instruction data wherein (1) the resource data is indicative of printer resources required by the printer to print at least one page subsequent to a current page, and (2) the resource data is sent with the instruction data required to print the current page to enable the printer to schedule resources for printing the document in response to the resource information.

Claim 52, as amended, differs from the applied art by requiring a computer for providing the printer processor with resource information as comments in page description language located in page headers for enabling the printer processor to learn, in advance of processing instruction data for a document printing state, the printer resources required to process instruction data for that document printing stage. The printer processor schedules printer processor resources for different document printing stages in accordance with the resource information to prevent printer stalls, and to cause the printer to print the document with the printer resources as scheduled.

Claim 54 distinguishes over the applied referenced by defining a printer processor that is supplied with resource information derived from instruction data indicative of printer processor resources required by the printer at different document printing stages, wherein the resource information is supplied as page description language located in page headers for enabling the printer to learn, in advance of processing instruction data for a document printing stage, the

printer resources required to process instruction data for that document printing stage. The printer processor schedules printer resources for different document printing stages in accordance with the resource information to prevent printer stalls.

The features of claims 1, 17, 35, 52 and 54 are not disclosed by Gerlach et al., U.S. Patent 5,469,532, previously relied on to reject claims 1-4, 6, 7, 9, 35, 38, 39, 44, 45, 50 and 56 under 35 U.S.C. 102(b), and as the primary or sole reference for obviousness rejections under 35 U.S.C. 103(a) of claims 58, 10-15, 53, 60, 61 and 63. The features are also not rendered obvious by Gerlach in combination with any of the secondary references applied in the most recent Office Action.

Claims 2-4, 6, 7, and 9 and 16 dependent either directly or indirectly on claim 1, are allowable, *inter alia*, with claim 1.

Applicants traverse the rejection of claims 5 and 8 as being obvious as a result of Gerlach et al. in view of Snipp (USP 5,699,495). The Office Action admits Gerlach et al. is deficient with regard to claim 5 because claim 5 requires a common information processing structure via the printer driver. The Examiner relies on Figure 2 of Snipp for this feature and states it would have been obvious to one of ordinary skill in the art to have modified Gerlach et al. to use the Snipp print driver because the Snipp print driver provides a single focal point for document printing instructions. However, the Examiner's reasoning is circular. There is no basis in the two references to combine them, other than the hindsight relied on by the Examiner.

With regard to claim 8, the Examiner admits Gerlach et al. does not disclose that the second information processing structure is a printer spooler. The Examiner relies on Snipp for a print spooler and says it would have been obvious to have modified Gerlach et al. to include such a print spooler because a print spooler provides more flexible and complex print scheduling. However, in

Gerlach et al., complex scheduling is performed by pointers 310 and 312, Figure 3A, as well as pointers 324 and 326, Figures 3B and 3C. Also, complex scheduling appears to be disclosed by Gerlach et al. in column 13, lines 56-62. The Examiner provides no adequate rationale as to why one of ordinary skill in the art would have modified Gerlach et al. to include a print spooler instead of index pointers.

Applicants traverse the rejection of claim 10 as being obvious as a result of Gerlach et al. in view of Motoyama (USP 5,319,748). The Examiner admits Gerlach et al. is defective with regard to claim 10 because Gerlach et al. does not disclose that the instruction data and resource information is specified as comments and that prior to sending data to the printer, the comments are filtered to extract resource information. The Examiner relies on a broad statement by Motoyama that comments are used to distinguish "various resources." However, such a broad statement is not adequate to render the method of claim 10 obvious. The Office Action also indicates Gerlach et al. does not disclose the requirement of claim 10 that comments for resource information be filtered. The Office Action, citing column 10, lines 29-31, states Gerlach et al. discloses filtering page description language (PDL) to determine what resources are required. However, page 10, lines 29-31 makes no mention of filtering. Instead, page 10, lines 29-31 indicates assembler 208 of computer 202 examines the document and converts the page description language to a render primitives list (RPL). While the document examination and conversion are occurring, resource assembler 208 is stated to determine which resources are required to print the document. The Examiner must indicate how such a statement discloses filtering PDL data. In addition, the Examiner provides no rationale as to why one of ordinary skill in the art would have modified the Gerlach et al. system with the broad Motoyama disclosure about various resources to meet the requirement of claim 10 for annotation to be in the form of comments of the page description

language and/or job control language and wherein instruction data and resource information from the computer are sent to the printer and the printer processor resources are scheduled.

The rejection of claims 11-15 as being obvious as a result of Gerlach et al. in view of the Motoyama U.S. Patent, further in view of Siegel and the Motoyama EP reference is incorrect. Applicants can not agree with the allegations in item 7, starting on page 11 of the Office Action, that the method of claims 11-15 would have been obvious to one of ordinary skill in the art by modifying Gerlach et al. in view of Motoyama, U.S. Patent 5,319,748 as a result of Siegel et al., U.S. Patent 5,678,244 and Motoyama (EP 0 538,059). The Office Action alleges it would have been obvious to one of ordinary skill in the art to have modified his combination of Gerlach et al. and Motoyama '748 to include the Motoyama feature of posting resource information at the beginning of each distinct document segment and the Siegel feature of sending a header at the beginning of a PDF. The Office Action alleges the motivation for the combination would have been to get the Gerlach et al. resource information to printer 218 prior to transmitting data to the printer as the resource information gets to the information first. However, Motoyama '059 does not indicate the definition and declaratory commands are on a current page of the document. The '059 reference merely indicates the definition and declaratory commands are at the beginning of each distinct document segment. The reliance on Siegel (USP 5,678,133) at column 6, lines 55-57 is inappropriate. There is nothing in this portion of Siegel to indicate the header of the current page includes resource data for a subsequent page.

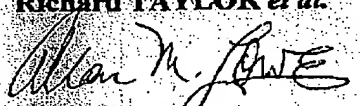
Applicants traverse the rejection of claim 16 on the same references relied on to reject, *inter alia*, claim 15. Claim 16 requires the resource information to be generated so it does not include resource information for the first page of the document. In the sentences bridging pages 13 and 14 of the Office Action, and the following sentence, the Examiner alleges Gerlach et al. discloses that

no resource information is generated prior to data arriving at the printer and that the print engine handles the use of the resources. However, this does not satisfy the requirement of claim 16 as discussed *supra* in this paragraph.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance of all pending claims is in order.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025, and please credit any excess fees to such deposit account.

Respectfully submitted,
Richard TAYLOR *et al.*



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